

ORTIZ, Al et al.
Application No.: 09/788,263
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Amendment to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

1-12. (Canceled pursuant Restriction Requirement)

13. (Amended) A method of EMI shielding a circuit board or flexible circuitry, the method comprising:
encapsulating an electronic component with a conforming insulating base coating;

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vacuum metallizing [applying] a first conductive layer over the insulating base coating; and
grounding the conductive layer to a ground trace to form an EMI shield for the electronic component.

14. (Canceled)

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15. (Amended) The method of claim 13 **[14]** further comprising maintaining a temperature of the component and base coating below approximately 200°C during vacuum metallizing.

16. (As filed) The method of claim 13 wherein the first conductive layer comprises aluminum, copper, silver, gold, tin, or nickel-chromium.

17. (As filed) The method of claim 13 further comprising applying a second conductive layer over the first conductive layer

18. (As filed) The method of claim 13 further comprising applying an insulating conformal layer over the first conductive layer.

19. (As filed) The method of claim 18 wherein the conformal layer is waterproof.

20. (Amended) The method of claim 13 further comprising improving the adhesion between the conforming insulating base coating and the first conductive layer by [wherein applying comprises adhering the conductive layer] using a glow discharge process.

21. (As filed) The method of claim 13 further comprising positioning the ground trace around a periphery of the component.

22. (As filed) The method of claim 13 wherein the ground trace is disposed between a first and second component.

23. (As filed) The method of claim 13 further comprising exposing the ground trace through the insulating coating.

24. - 34. (Canceled pursuant Restriction Requirement)

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35. (Amended) A method of shielding electronic components, the method comprising:
thermoforming a plurality of compartments into a thermoformable article;
vacuum metallizing a conductive layer onto the [a] thermoformed article;
attaching the vacuum metallized thermoform to a ground trace on a circuit board to form a grounded shield by coupling a conductive adhesive between the vacuum metallized thermoformed article and the ground trace; and
separating the electronic components into separate compartments of the vacuum metallized thermoform article so as to prevent cross-talking between the electronic components.

36. - 37. (Canceled)

38. (Amended) The method of claim 35 [37] wherein coupling comprises dispensing the conductive adhesive onto one of the thermoform and the ground trace.

39. (Amended) The method of claim 35 [37] wherein coupling comprises screen printing the conductive adhesive on an attachment portion of the thermoform.

40. (Amended) The method of claim 35 [37] wherein the conductive adhesive is a preformed adhesive strip.

41. - 45. (Canceled pursuant restriction requirement)

46. (As filed) A method of shielding electronic components on a circuit board, the method comprising:

AI providing a vacuum metallized substrate comprising a plurality of compartments;

coupling attachment surfaces of the metallized substrate to a ground trace on a circuit board with a conductive adhesive; and

separating electronic components into the compartments of the metallized substrate so as to prevent cross talk between the electronic components.

47. (As filed) The method of claim 46 wherein the substrate comprises one of a thermoform and injection molded plastic.

48. (Amended) The method of claim 46 wherein coupling comprises contacting the [an] attachment surface against the ground trace between the electronic components.

49. (As filed) The methods of claim 46 wherein the attachment surfaces completely surround the electronic components.

50. - 58. (Canceled pursuant Restriction Requirement)

59. (As filed) A method of shielding an electronic component, the method comprising:

attaching a base portion of a metallized substrate to the ground trace surrounding the electronic component; and

removably coupling a top portion of a metallized substrate to the base portion to cover the electronic component.

60. (As filed) The method of claim 59 further comprising positioning a conductive adhesive over at least a portion of a ground trace.

61. (As filed) The method of claim 59 wherein coupling comprises overlapping a portion of the top portion over the bottom portion.

62. (As filed) The method of claim 59 wherein the top portion overlaps the bottom portion over a periphery of the bottom portion.

63. (As filed) The method of claim 59 further comprising position protrusions between a periphery of the top portion and bottom portion of the EMI shield.

64. (As filed) The method of claim 63 wherein the protrusions are spaced no larger than one-half a wavelength of electromagnetic radiation emitted from the electronic component.

65. (As filed) The method of claim 59 wherein coupling comprises inserting a tab in a groove, wherein one of the tab and groove is disposed on the top portion and the other of the tab and groove is disposed on the bottom portion.

66. (As filed) The method of claim 59 further comprising thermally evaporating a conductive layer onto the thermoform.

67. (As filed) The method of claim 59 wherein the substrate body comprises one of a thermoform and injection molded plastic.

68. - 72. (Canceled pursuant Restriction Requirement)

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